

AMENDMENTS

Amendments to the Specification

Please delete the first paragraph of page 7 of the specification and substitute the following revised paragraph, as follows:

The hot gas **20** enters an inlet plenum **25** attached to the base of the mold **26**. The gas **20** is distributed to the inter walls **28** on one side of the mold **26**, which must be porous to the gas. In the preferred embodiment of the invention, both the inter **28** and outer walls **30** must be porous. Less preferably, at least one inner **28** and one outer **30** wall are porous. The hot gas **20** must be distributed to flow more or less uniformly through the mixture of the powdered mixture **32** to be sintered. It should be understood that mixture **32** generally comprises carbon particles and a binder, such as a thermoplastic resin. The selection and sizing of the carbon particles and thermoplastic binder, and any additional materials sintered into the resulting carbon block, are left to the practitioner as is or may be known in the art. In the preferred embodiment of the method for forming a filter block having annular shape, heated gas **20** enters the center pin **50**, formed by the inter walls **28** of the mold **26** and preferably constructed from a porous sintered metal, passes radially through the mixture **32**, and exits through the porous sintered metal outer mold walls **30**. The gas **20** therefore enters the mixture **32** uniformly and heats the individual binder particles by direct contact. The gas **20** exits through the outer surface (walls) **30** of the hollow cylindrical block mold **26** into an outlet plenum **34** (see FIGS. 2 & 3) from which it returns via a return line (not shown), to the compressor **22** and then to the inlet plenum **25**. In a slightly less preferred embodiment of the inventive method, the gas can be passed through the

external wall **30** of the mold **26**, through the mixture and into the porous interior walls **28**. It is contemplated that for lower cost heating, the gas **20** such as air can be atmospheric air that can be simply exhausted to the atmosphere at the end of the heating process. Process control and monitoring instruments include means for measuring and controlling the gas flow **40**, such as through gas flow meter, and means for measuring and controlling the heated air temperature **42**, such as through a thermostat. All steps of the inventive method can be automated.